

Name: _____ Date: _____

Dividing Radical Expressions

1.
$$\frac{4}{2\sqrt{3} - \sqrt{5}}$$

2.
$$\frac{\sqrt{5} + 3}{4 - \sqrt{5}}$$

3.
$$\frac{5}{-3 - 3\sqrt{3}}$$

4.
$$\frac{\sqrt{5} + 2\sqrt{2}}{4 - 5}$$

5.
$$\frac{3}{4 + 4\sqrt{5}}$$

6.
$$\frac{\sqrt[3]{54x^3y^5}}{\sqrt[3]{16x^2y^2}}$$

7.
$$\frac{4x^3 - 3x\sqrt{3}}{3\sqrt{3x^2}}$$

8.
$$\frac{2 + 5\sqrt{3}}{-4 + 4\sqrt{2}}$$

Dividing Radical Expressions

Answers

$$1. \frac{4}{2\sqrt{3} - \sqrt{5}}$$

$$= \frac{8\sqrt{3} + 4\sqrt{5}}{7}$$

$$3. \frac{5}{-3 - 3\sqrt{3}}$$

$$= \frac{5 - 5\sqrt{3}}{6}$$

$$5. \frac{3}{4 + 4\sqrt{5}}$$

$$= \frac{-3 + 3\sqrt{5}}{16}$$

$$7. \frac{4x^3 - 3x\sqrt{3}}{3\sqrt{3}x^2}$$

$$= \frac{4\sqrt{3}x^2 - 9}{9}$$

$$2. \frac{\sqrt{5} + 3}{4 - \sqrt{5}}$$

$$= \frac{7\sqrt{5} + 17}{11}$$

$$4. \frac{\sqrt{5} + 2\sqrt{2}}{4 - 5}$$

$$= -5 - 2\sqrt{2}$$

$$6. \frac{\sqrt[3]{54x^3y^5}}{\sqrt[3]{16x^2y^2}}$$

$$= \frac{3y\sqrt[3]{x}}{2}$$

$$8. \frac{2 + 5\sqrt{3}}{-4 + 4\sqrt{2}}$$

$$= \frac{2 + 2\sqrt{2} + 5\sqrt{3} + 5\sqrt{6}}{4}$$